4

Adolescent Women and Reproductive Health

For Alusa, the cost of pregnancy was great. She stopped going to school. No longer could she dream of a life of more opportunity. For Alusa, the cost of childbirth was pain. Her too small body tore. Now her husband turned away from her in disgust. She was only 16 years old, yet she bore the heavy burdens of an adult woman.

For most of human history, marrying early and having children soon thereafter have been expected events in a woman's life. Today, however, in Africa as elsewhere, more young women are enrolled in school. Increasing urbanization means that families have less need for large numbers of children. Traditional values have given way to more modern lifestyles and attitudes. In the past, adolescent childbearing was confined to marriage; today, early childbearing increasingly occurs outside of marriage.[7] These rapid social changes have made adolescent fertility less acceptable. Adolescent fertility is not increasing in most African countries; however, Africa has the highest rates of adolescent fertility in the world.

In Africa, the social conditions that underlie early childbearing for women who live in rural areas differ from those for educated, urban women:

- **Young, rural women**. Social conditions in rural areas limit educational opportunities, and women marry young. Early marriage and, therefore, early childbearing are expected and even desired. However, having children early can have negative consequences because these young mothers are often physiologically immature and lack access to adequate health care.
- **Young urban, educated women**. Social conditions in urban areas promote education and delayed marriage. Premarital fertility is strongly discouraged because it may hurt a schoolgirl's future education and employment opportunities. However, because safe, legal abortions are generally not available in Africa, an adolescent's decision to terminate a pregnancy poses great health risks.

In most parts of Africa, high fertility is still valued, and motherhood may seem a more certain route to social standing than education.[7] To date, much of the focus on adolescent fertility has centered on the health and educational consequences of early childbearing among a very small group of women, primarily unmarried women enrolled in school. However, married adolescents actually have higher birth rates. Because of rapidly changing circumstances and expectations, concern about early fertility may soon broaden to encompass married women as well.

THE MEANING OF ADOLESCENCE

Adolescence is not easily defined. In general, it is the period of life between childhood and adulthood. Demographers sometimes include only those aged 15 to 19; at other times, they include youth up to age 24. This chapter uses both age groups in presenting data. More than a demographic category, adolescence is a culturally defined phenomenon. It is a transition period that can influence a young person's future life course.

For African adolescents, increasing modernization has changed the course of this transition period. Today, extended families are frag-

mented, and elders traditionally responsible for educating and preparing young people for sexuality and parenthood are no longer able to communicate across geographic distances, different languages, or generations.[11,26] More young women are enrolled in secondary school, yet strong normative pressures to become a parent persist.[7]

DEMOGRAPHIC LEVELS AND TRENDS

MARRIAGE BEFORE AGE 20

Marriage in Africa often involves a sequence of stages and steps rather than a clearly defined event.[7,11] Thus, it can be difficult to determine the age at which a woman first "marries" or whether she is "married" when she gives birth. Many births defined as premarital occur among couples who eventually marry.

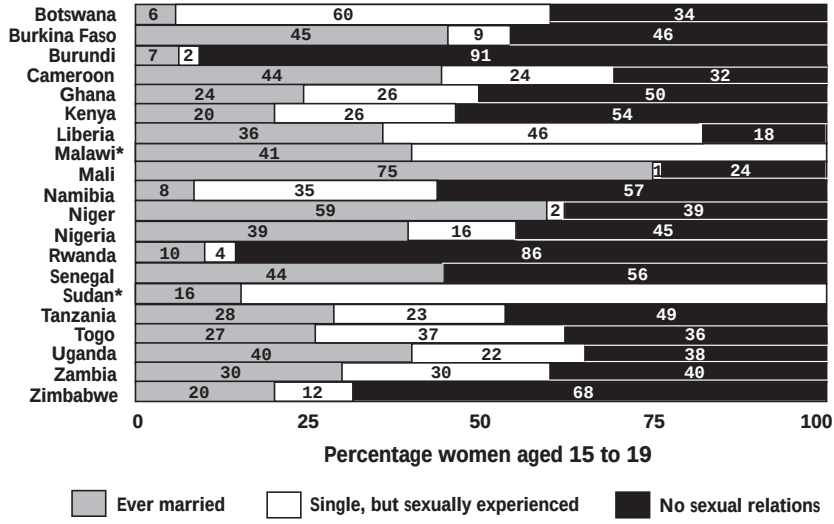
Most women in Africa marry before the age of 20 (see Figure 4: 1), especially in rural areas.[11] The highest rates of early marriage are in Cameroon, Benin, Ghana, Côte d'Ivoire, Nigeria, Mauritania, and Senegal, where between 70% and 80% of women marry before age 20.

The more education a woman receives, the later she marries. In Kenya, Ghana, Senegal, and Zimbabwe, for example, about one-third of women with secondary educations report marrying before 20, but more than three-fourths of women with no education report doing so.[7]

ADOLESCENT SEXUAL ACTIVITY

Large proportions of adolescent youth are sexually active (see Figure 4:1). Among urban women aged 20 to 24, three-fourths in Botswana, Liberia, Togo, and Uganda and two-thirds in Ghana and Kenya report engaging in premarital sexual activity before age 20. Adolescent exposure to intercourse varies by educational level; in Botswana, Burundi, Ghana, Kenya, Liberia, Nigeria, Togo, Uganda, and Zimbabwe, women who have attended secondary school are more likely than women with no schooling and women with primary education to report having engaged in premarital sex.[7]

Figure 4:1 Marriage and sexual experience among female adolescents



*Data on sexual experience of never-married women not available.
Sources: Balepa et al. [1992]; Barrere et al. [1994]; Gaisie et al. [1993]; Katjiuanjo et al. [1994]; Kourgueni et al. [1993]; Malawi National Statistical Office [1994]; Ngailaba et al. [1993]; Population Reference Bureau [1992]; Republic of the Sudan Department of Statistics [1991]

Rates of sexual activity are not likely to be greater among schoolgirls than among their married peers. However, sexual activity among unmarried adolescents is socially proscribed in most countries; thus, its occurrence draws greater attention. There is a good deal of debate over what motivates schoolgirls to enter and maintain sexual relationships. Both African and Western observers point to the weakening of traditional controls on adolescent sexual activity outside of marriage. Many traditional African societies transmit information and values about sexuality and family life through age-prescribed rites of passage or initiation ceremonies. As families move into cities, adolescents may be separated geographically from kin, who traditionally taught the young about values and life events. An adolescent's school and peer groups have replaced her kin group as the main socializing agents.[7,11]

Traditional norms may be further eroded by adolescents' exposure to nontraditional values through novels, radio, and television as well as through formal schooling. Adolescent and older men may pressure young women to become sexually active. The phenomenon of "sugar daddies," older men who bestow gifts and money on young girls in exchange for sex, is almost universally noted in the literature.[3,5,7,11,26] Young women may be forced into sexual relationships with teachers or older men to finance their educations.[3,7]

Births Before Age 20

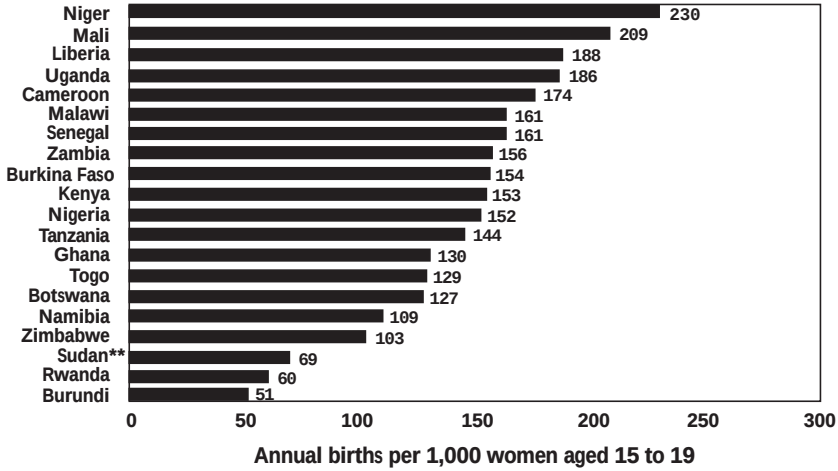
Adolescent fertility rates, presented in Figure 4:2, range from 51 per 1,000 in Burundi to 230 per 1,000 in Niger. In many countries, more than 20% of women aged 15 to 19 have given birth to at least one child (see Figure 4:3). In Nigeria, Mauritania, and Sudan, more than 15% of girls have given birth before age 15. However, in most African countries, the proportion of women giving birth before age 15 is much lower, ranging from about 3% in Benin, Ghana, and Mali to 7% in Kenya and Côte d'Ivoire. By age 20, most women in most African countries have given birth.[23]

In some African countries, such as Burundi, Ghana, Kenya, and Zimbabwe, adolescent fertility actually appears to be declining. In other countries such as Botswana, Liberia, and Mali, adolescent fertility has increased dramatically.[7]

Premarital Births and Conceptions

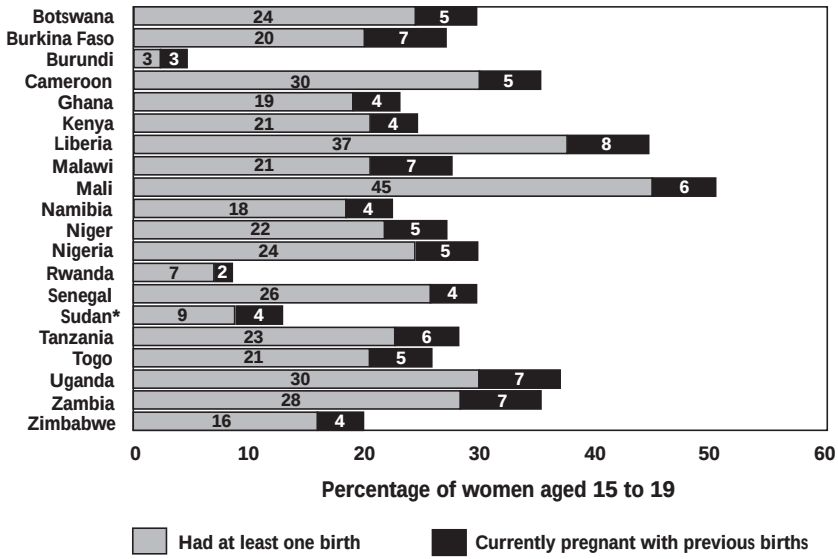
The incidence of adolescent *premarital births* varies widely across Africa. Forty-three percent of women aged 20 to24 in Botswana report having had a premarital birth, but in Mali, Burundi, Ghana, and Nigeria, the figure is less than 10%. In Kenya and Liberia, about one in five women aged 20 to 24 report having given birth before marriage.[7]

Figure 4:2 Female adolescent fertility rates*



*During the three years before the survey in each country.
**Ever-married women only.
Sources: Balepa et al. [1992]; Barrere et al. [1994]; Gaisie et al. [1993]; Katjiuanjo et al. [1994]; Kourgueni et al. [1993]; Malawi National Statistical Office [1994]; Ngailaba et al. [1993]; Population Reference Bureau [1992]; Republic of the Sudan Department of Statistics [1991]

Figure 4:3 Childbearing among adolescent women



*Ever-married women only
Sources: Balepa et al. [1992]; Barrere et al. [1994]; Gaisie et al. [1993]; Katjiuanjo et al. [1994]; Kourgueni et al. [1993]; Malawi National Statistical Office [1994]; Ngailaba et al. [1993]; Population Reference Bureau [1992]; Republic of the Sudan Department of Statistics [1991]

The proportion of women experiencing a premarital birth by age 20 appears to be increasing in some countries. In Botswana, 34% of older women (aged 35 to 39) but 43% of women aged 20 to 24 report having had a premarital birth by age 20. Kenya and Liberia have experienced similar increases, with about 12% to 13% of women aged 35 to 39 but about 20% of women aged 20 to 24 reporting a premarital birth by age 20.

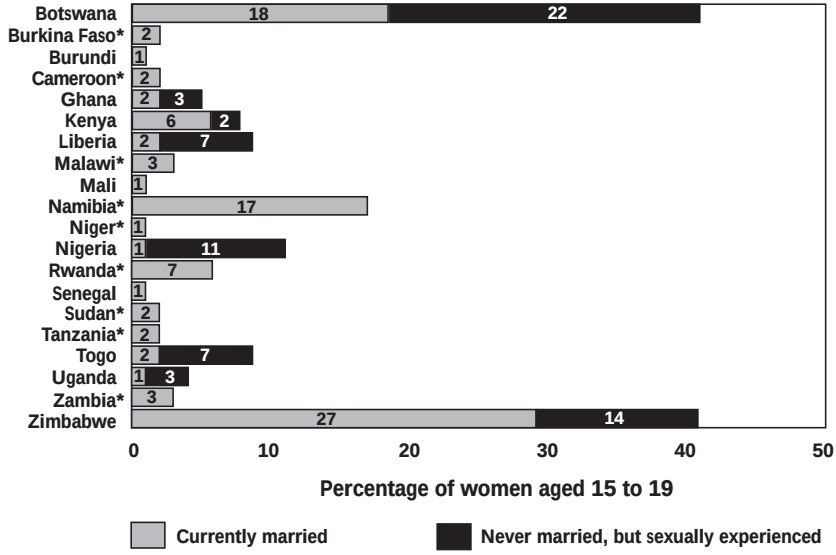
In Kenya almost half of all first births are premaritally conceived; in Benin, Cameroon, and Nigeria, the proportion is about one-third.[23] The first pregnancies of unmarried women are much more likely to be unintended than those of married women. In Botswana, Ghana, Kenya, Liberia, Togo, and Uganda, 51% to 87% of the first pregnancies of never-married women are unintended; the proportion for married women is about one-third.[21]

Contraceptive Knowledge and Use

Although a large proportion of women aged 15 to 19 report knowledge of a modern method of family planning, *contraceptive use* is generally low. More than three-fourths of adolescent women in Botswana, Kenya, and Zimbabwe and 50 to 75% of adolescent women in Ghana, Liberia, Senegal, Tanzania, Togo, and Uganda report that they know of a modern method (pills, injectables, intrauterine devices (IUDs), condoms, vaginal methods, and male and female sterilization).[20,21] However, very few sexually experienced adolescents are currently using a modern method of family planning. (See Figure 4:4.) The low levels of contraceptive use among adolescents are paralleled by high estimates of unmet need for family planning. See Figure 4:5 for estimates of unmet need for several countries. In most, the unmet need for family planning is higher among sexually experienced but never-married women, who are eager to avoid unintended pregnancy.

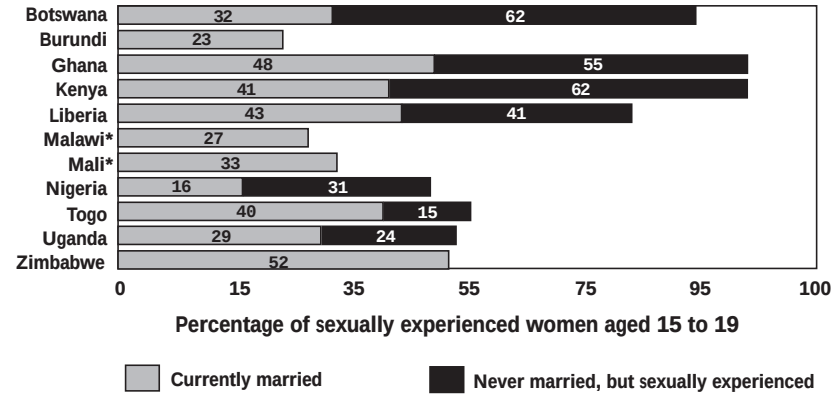
Focus groups conducted with youth in Nigeria and Kenya reveal that, while many know of modern contraception and where to obtain it, they also rely on traditional methods or believe that modern contraception could harm the woman or man.[5]

Figure 4:4 Current use of modern methods of family planning among female adolescents, by marital status



*Data on never married women not available.
Sources: Balepa et al. [1992]; Barrere et al. [1994]; Gaisie et al. [1993]; Katjiuanjo et al. [1994]; Kourgueni et al. [1993]; Malawi National Statistical Office [1994]; Ngailaba et al. [1993]; Population Reference Bureau [1992]; Republic of the Sudan Department of Statistics [1991]

Figure 4:5 Unmet need for family planning among female adolescents, by marital status



*Data not available for never-married women.
Sources: Malawi National Statistical Office [1994]; Population Reference Bureau [1992]

FEMALE EDUCATION AND ADOLESCENT FERTILITY

The relationship between *female education* and *fertility* is often believed to be a simple one: increases in educational attainment are accompanied by decreases in fertility. However, this relationship is actually more complex. Education may change reproductive behavior and affect fertility in a number of ways: by increasing knowledge of reproduction and contraception, by delaying entry into marriage or other unions, or by changing attitudes about contraception and childbearing.[23] In turn, an early unplanned pregnancy may cause a woman to leave school, lowering her educational achievement. In addition, a woman enrolled in school is likely to be separated from the community that traditionally educated her about sexuality and discouraged her from behaviors that could result in an early pregnancy.

In fact, women enrolled in school *are* at greater risk of experiencing an out-of-union birth, because they are less likely to be married than their peers who are not in school. Among unmarried girls, those who expect to go to secondary school may delay sexual activity longer than their peers who do not expect to continue school. Women with a secondary education are less likely to give birth before age 20 than women with no education. Women with no formal education are more likely to marry early and are thus at less risk of premarital pregnancy.[7]

FEMALE SCHOOL ENROLLMENT RATES

Even after two decades of substantial improvement in school enrollment rates of girls, Africa lags behind other regions. In some countries, including Madagascar, Tanzania, Kenya, Zambia, Lesotho, Zimbabwe, Cameroon, Botswana, and Mauritania, nearly as many girls are enrolled as are boys. In other countries, such as Benin and Chad, only a third or fewer of primary school students are girls.

At the secondary school and university levels, many more males attend than females. Females account for more than 40% of secondary enrollment in only eight countries (Botswana, Congo, Gabon, Kenya, Lesotho, Madagascar, Swaziland, and Zimbabwe). In several countries,

including Burkina Faso, Burundi, Chad, Ghana, Malawi, Mali, Niger, Rwanda, Tanzania, and Uganda, less than 10% of female adolescents are enrolled in secondary school.[7]

Contraceptive Knowledge and Use

The level of *contraceptive knowledge* may vary according to a woman's marital status. If ever-married women are more likely to be sexually active than their never-married peers, they may be more knowledgeable about contraception. On the other hand, never-married women are likely to have received more formal education, including sex education.[23]

Contraceptive use increases with education. Among women aged 15 to 24 in Kenya, 4% of those with no education have ever used modern contraception. This proportion rises to 10% among women with primary education and 19% among women with secondary education. Contraceptive use by women aged 15 to 24 with a secondary education ranges from 11% in Burundi and Senegal to 54% in Botswana.[7]

Patterns of Adolescent Fertility Change

Trends in adolescent fertility over the last 20 to 30 years fall into three distinct patterns.[7]

Pattern I

In countries such as Botswana and Kenya, adolescent birth rates are not increasing and may even be decreasing, but the proportion of births occurring outside marriage and to girls still enrolled in school is growing. Rates of female secondary school enrollment are high (between 31% and 36% of women aged 20 to 24 have attended secondary school), and marriage is often delayed. Premarital pregnancies and births are increasingly seen as mistimed events with negative consequences.

PATTERN II

Countries such as Liberia, Uganda, and Zimbabwe seem to be following a path similar to that taken by the first group, but at a slower pace. Increases have occurred in female school enrollment (but still fewer than 12% of women aged 20 to 24 have attended secondary school), age at marriage, and premarital childbearing.

PATTERN III

In countries such as Burundi, Ghana, Nigeria, Senegal, Mali, and Togo, very little change has occurred in adolescent childbearing, female education, or early marriage. Almost all women marry before age 20 in Mali, and fewer than 1% of adolescents are enrolled in secondary school. In Togo, levels of early marriage and childbearing have remained unchanged despite increases in secondary enrollment rates from less than 1% in the 1960s to 18% in the 1980s.

CONSEQUENCES OF EARLY SEXUAL ACTIVITY

In Africa, as elsewhere, the consequences of early childbearing are determined in large part by the surrounding social context. The impact of early childbearing may vary greatly according to a woman's level of education, the social reaction to adolescent fertility, and society's expectations.

FEMALE GENITAL MUTILATION

Genital mutilation, also known as female circumcision, is practiced in a number of African cultures as a rite of passage to womanhood. The practice contributes to early marriage and fertility. The combination of female circumcision and early birth is highly traumatic and potentially fatal for many African adolescents. Female genital mutilation is widely practiced in Cameroon, Mauritania, Chad, the Central African Republic, Sudan, Egypt, Niger, Mali, Burkina Faso, Kenya, and Tanzania. The most extreme form, infibulation, involving

removal of the entire clitoris as well as the labiae minora and majora, is practiced in Mali, Sudan, Somalia, parts of Ethiopia, and northern Nigeria. The procedure itself can lead to hemorrhaging, shock, acute infection, and death. It can also complicate childbirth, prolonging labor and leading to the birth of stillborn or brain-damaged children.

Social Consequences

Regardless of their motives for sexual activity, most schoolgirls who become pregnant suffer common consequences, and it is among schoolgirls that these consequences are likely to be most devastating. Beyond the hazards of an illegal and unsafe abortion, their futures may be drastically changed by a birth that forces them to leave school. In fact, leaving school is one of the most serious consequences of early pregnancy, for both individuals and society. In 1986, an estimated 11,000 girls in Kenya dropped out of school because of pregnancy. In 1982, 18,766 Tanzanian girls were expelled because they were pregnant. Every year, 10% of the women enrolled in secondary school in Botswana, Kenya, and Mali are reported to drop out because of pregnancy.[7,11]

In the past, adolescent women who became pregnant were married and unschooled; society had invested few resources in them. Increased education and rising expectations for young women have transformed the social and economic environment. The education of women represents an investment of scarce social and personal resources. Leaving school because of pregnancy results both in an individual loss of opportunity and in a squandering of scarce social resources.[8,11]

Sexually Transmitted Infections

Aside from pregnancy, the greatest risk of sexual activity is becoming infected with a sexually transmitted infection (STI). Women are biologically more at risk of acquiring an STI from a man than a man is from a woman. (See Chapter 6 on Sexually Transmitted Infections.) The negative consequences of STIs can include infertility. Human

immunodeficiency virus (HIV) poses an especially dangerous threat; the risk of acquiring HIV is increased when women have other STIs.

Many of the negative consequences of STIs—pelvic inflammatory disease (PID), infertility, ectopic pregnancy, and cervical cancer—do not appear until later in life. The inability to have children may leave a woman ostracized in many African societies.[26]

Both the detection and reporting of STIs are poor in sub-Saharan Africa. Infection rates appear to be quite high. Young women are more likely to become infected with HIV and other STIs than are young men or older women.[7] A study at Kenyatta National Hospital in Nairobi found that 36% of pregnant women aged 15 to 24, but only 16% of older pregnant women, had an STI. The study found that adolescents, who comprised one-third of the syphilis cases, were twice as likely to be infected with the disease than older women. Another Kenyan study found that one-third of rural women aged 13 to 15 had laboratory evidence of gonorrheal infection.[26]

Cultural practices and adolescent behavior may worsen both the spread and the sequelae of STIs among adolescents. Older, adult men who have sexual intercourse with much younger women expose their partners to their entire sexual histories. Young women in polygamous unions also face an increased risk of infection.[7] In addition, older urban men increasingly seek out young women, who are believed to be "clean" or virgins to avoid infection with HIV.[3,26] Adolescents may not recognize the symptoms of STIs, or they may be reluctant to seek treatment.

Pregnancy and Delivery

Pregnancy and delivery pose major health hazards for adolescents. Maternal mortality is highest among women who are very young or very old. Women less than 20 years old suffer more pregnancy and delivery complications, such as toxemia, anemia, premature delivery, prolonged labor, and cervical trauma, and are at higher risk of delivering low-birthweight babies. The infants of adolescent mothers suffer higher rates of infant and child mortality.[18] Worldwide, preg-

nancy-related complications are the leading cause of death among women 15 to 19 years old.[10]

Contributing factors, other than biological age, that put young women at greater risk include the environment in which their pregnancies occur. African women of all ages bear the highest risk in the world of pregnancy-related illness and death because of their poor living conditions, inadequate nutrition, and insufficient health services.[26] These conditions and their consequences may be worse among young mothers. Adolescents with unintended pregnancies are particularly likely to have poor nutrition, fail to get prenatal care, and attempt to hide their pregnancies.[18]

The health concerns of early fertility are not affected by a woman's marital status.[11] However, unmarried women are at greater risk for the consequences of unintended pregnancy than are their married peers. Married women find it easier to obtain modern methods of contraception and feel less compelled to obtain an unsafe abortion to conceal a pregnancy.

Eclampsia

Pregnancy-induced high blood pressure is the primary pregnancy complication among adolescents. High blood pressure can lead to preeclampsia (toxemia), which in turn can lead to eclampsia. Untreated, eclampsia can cause congestive heart failure, paralysis, kidney failure, blindness, chronic hypertension, or death. A study in Nigeria found that 40% of women presenting with eclampsia were age 15 or less.[23,26]

Anemia

Adolescents may also be at a higher risk of developing anemia and hemorrhage, conditions made worse by malnutrition. One study in Nigeria found that 60% of adolescent women, but only 15% of women aged 24 to 30, had anemia. Pregnancy, which depletes a woman's nutrient and iron reserves, may be especially harmful to very young adolescents, whose bodies are still developing.[23,26]

Vesicovaginal fistula

A common consequence of early childbirth for both circumcised and uncircumcised women is vesicovaginal fistula (VVF), a tearing of the wall between the bladder and vagina that leads to constant leaking of urine. Two-thirds of the cases of VVF in northern Nigeria, where the condition is not rare, are reported to be the result of obstructed first labor.[23,26] In Kenya, one study found that 45% of all cases of VVF were among adolescents.[26] Women suffering from VVF are ostracized from society and often turn to begging or prostitution to survive.[10,26]

Obstructed or prolonged labor

Obstructed or prolonged labor is more likely to occur among adolescent mothers, especially very young adolescents.[23] Cephalo-pelvic disproportion (CPD), which occurs when the baby's head is too large to pass through the mother's pelvis, is a common complication during delivery. CPD occurs primarily in very young adolescents, whose physiological development is not complete. CPD is attributable not only to age but also malnutrition, which leads to an under-developed bone structure. CPD requires prompt cesarean delivery to save the life of the baby and possibly the mother. In the absence of surgical delivery, women may experience uterine rupture, vaginal tearing and fistulae, and severe lesions. The child may be crushed during delivery. CPD is a manageable condition, but adolescent women are less likely to receive the prenatal and delivery care that could reduce the problems associated with CPD. A study in Kenya found that 70% of the young women delivering at a local community hospital experienced difficult labor.[26]

Abortion

Abortion probably poses the greatest direct threat to young women's health. In many African countries, abortion is illegal and dangerous. In fact, one-fifth of all maternal deaths in east and central Africa and as many as 54% in Ethiopia are due to complications of induced abortion.[13]

Evidence suggests that adolescent women are more likely to seek abortion than older women and, thus more commonly suffer from abortion-related morbidity and mortality.[3,10,26] Adolescents also are more likely to seek abortion from non-medical providers, to seek abortions later in pregnancy, and to delay seeking treatment for complications.[26] (See Chapter 23 on Education and Counseling.) A study conducted at a major Nigerian hospital between 1985 and 1988 found that 72% of the women presenting for treatment of complications of illegal induced abortions were between the ages of 13 and 19—58% were primary or secondary school students, and 81% were unmarried.[1] Likewise, in Sierra Leone, women aged 15 to 24 comprised 81% of the women presenting at hospitals with abortion-related complications, and, in Zambia, women under 25 represented 59% of abortion-related hospital admissions. A study in Nairobi, Kenya, found that 67% of abortion-related deaths were to women aged 10 to 25.[3] In Nigeria, illegal abortion is believed to be the leading cause of death among unmarried women aged 15 to 24, particularly those in school.[26]

POLICIES AFFECTING ADOLESCENT REPRODUCTIVE HEALTH IN AFRICA

Adolescents are a low priority in both policies and programs at the national level in Africa. In many countries, pregnant students are often forced to leave school. In some countries, only married women can get contraceptives. Yet many other countries have started family life or sex education programs or raised the minimum legal age for marriage.

Current policies that affect adolescent reproductive behavior or its consequences are surveyed in Table 4:1, which provides an overview of five categories of policy: the provision of family life or sex education, policies regarding schoolgirl pregnancy, abortion laws, access to contraception, and minimum legal age of marriage. In many instances, information about these policies is not readily available. For example, there is very little information on school policies for preg-

nant students or access to contraception for adolescents. In addition, the table does not include any information on policies regarding female enrollment in secondary school, employment for teenagers, or efforts to improve the status of women, all of which affect adolescent reproductive behavior. Few nongovernmental organizations provide family planning services, vocational training, and formal schooling for adolescents who have children and were expelled from school. Some examples are the Tanzanian UMATI, Pathfinder International, the Maria Clementine Foundation, and the Botswana YWCA. More are needed.

Family Life Education

Family life education (FLE) has been widely implemented throughout Africa. FLE curricula combine sex education with information on family roles and family life. In a sense, FLE is an attempt to institutionalize the kind of education that was previously provided by tribal elders. Twenty-three African countries offer FLE in primary schools, and 27 provide FLE at the secondary level.

However, there are several barriers to FLE's success:

- In countries where school enrollment rates are low, FLE has very limited influence on adolescent behavior.
- Adolescents may be exposed to the risk of pregnancy before they receive any FLE. Some countries do not offer FLE until secondary school. FLE has also been criticized for not reaching older youths. Several countries have instituted FLE in teacher's training colleges or at the university level.
- The content and quality of FLE curricula vary widely. Some schools focus on population education and exclude sex education and family planning education. In addition, teachers may be unqualified or unable to teach FLE successfully. They may lack training, materials, or time.[3,7,17]
- There have been few, if any, evaluations of the impact of FLE on adolescent sexual behavior in sub-Saharan Africa. In the United States, studies have found that sex education pro-

grams have little impact on adolescents' behavior. The same may be true in Africa. In fact, African adolescents' knowledge of reproduction remains low across all education levels. In focus groups in Kenya and Nigeria, many youths complained that the information they received in school regarding reproduction was often incomplete and did not describe how to prevent pregnancy or STI transmission.[5]

SCHOOL POLICY

There is little information on school policies regarding pregnancy in most African countries, but in general, schoolgirl pregnancy is not tolerated. Expulsion or requiring a pregnant student to leave school for a while are common responses. In Botswana and Kenya, for example, young women may be allowed to return to school a year later. In Liberia, they are permitted to transfer to night school. School administrators and teachers contend that these young women are "bad influences." In some countries, nongovernmental organizations are allowed to provide formal education to girls who were expelled because of pregnancy.

ABORTION

Access to abortion is almost universally restricted across Africa. A few countries prohibit all abortions; 12 countries permit abortions only to save the life of the pregnant woman. Several countries permit abortions when the pregnant woman's physical or mental health is endangered. However, even in countries where abortion is legal, the requirements may be so great as to make abortions very hard to get. In many countries, the number of illegal abortions is far greater than the number of legal procedures.[13] Such is the case in Zambia, for example, which has one of the most liberal abortion laws in Africa. Abortions may be performed only in a hospital setting, and a woman must obtain the signatures of three physicians before her abortion is authorized.[13] These laws may pose barriers that are especially burdensome to adolescents.

Contraceptive Access and Services

A few countries limit access to contraception for all women, and several restrict access for unmarried adolescents even further. The national government of Swaziland is exceptional in its explicit promotion of contraceptive availability for unmarried adolescents. Kenyan president Daniel Arap Moi, in contrast, has publicly stated his opposition to contraception for unmarried adolescents.[4] Even in countries where formal bans do not limit adolescents' access, there is often strong resistance to providing contraceptives to unmarried teens.[3,23] Requirements such as spousal consent or medical prescription for contraception also deter adolescent contraceptive use. For most of sub-Saharan Africa, the national family planning service policies developed since 1990 have officially sanctioned reproductive health services for unmarried adolescents. Some examples exist in Uganda, Tanzania, Botswana, and Togo.

Even where there are no formal policies against providing family planning to adolescents, the stigma attached to visiting a clinic serves as a formidable barrier to contraceptive use for many adolescents.[3,5,7,8,23,26] As contraceptives become increasingly available in pharmacies and other local commercial outlets such as patent medicine shops, adolescents' access to family planning may increase.[8]

Age at Marriage

Early marriage may provide women with security, improved nutrition, and social support; however, the biological and physiological factors of young maternal age remain a potential health hazard for both a woman and her offspring (see Chapter 1 on Benefits of Family Planning). Traditional norms prescribing early marriage have persisted despite legal efforts to change marriage patterns. Laws banning early marriage have often not been observed or enforced.[7] In countries such as Ghana, Kenya, Nigeria, and Côte d'Ivoire, the legal marriage age varies according to major administrative divisions, religious groups, or ethnic groups, which suggests that governments have had little success in changing marriage customs.[23] In Côte d'Ivoire, 41% of urban women and 43% of rural women marry before the legal age of 18. In Senegal, where the legal age for marriage is 16, 16% of urban women and 36% of rural women are married before age 15.[7]

Table 4:1 Survey of policies related to adolescent fertility in sub-Saharan Africa

Country	Family life or sex education	Circumstances for which abortion is permitted	Access to contraception	Minimum legal age for a woman to marry
Benin	prim and sec FLE in workplace	save life of woman	?	?
Botswana	in progress	unrestricted	?	?
Burkina Faso	prim and sec	save life of woman	by Rx	—
Burundi	prim and sec	medical risk	—	—
Cameroon	in progress	health risk; rape or incest	—	16
Cape Verde	prim and sec	?	—	—
C.A.R.	prim and sec	save life of woman	—	—
Chad	prim and sec	save life of woman	—	—
Congo	prim and sec	broad medical	—	18
Côte d'Ivoire	prim and sec	save life of woman	restricted for all	18
Ethiopia	sec	narrow medical	—	12-15[a]
Gabon	in progress	narrow medical	no Rx if under 25	15
Gambia	in progress	broad medical	married only	no min
Ghana	in progress	broad medical	—	none-21[a]
Guinea	prim and sec	broad medical	—	17
Kenya	sec	certified health risk	proscribed for unmarried youth	9-18[a]
Lesotho	in progress	health risk	—	16
Liberia	prim and sec, TC	save life of woman	—	16
Madagascar	prim and sec	severely restricted	by Rx for adults only	14
Malawi	in progress	save life of woman	—	—
Mali	prim and sec	prohibited	permitted for birth spacing	16-18[a]
Mauritania	prim and sec	narrow medical	by Rx only	—
Mozambique	prim and sec, TC, univ	save life of woman	permitted for birth spacing	—
Niger	prim and sec	narrow medical	—	16

Table 4:1 Survey of policies related to adolescent fertility in sub-Saharan Africa (Continued)

Country	Family life or sex education	Circumstances for which abortion is permitted	Access to contraception	Minimum legal age for a woman to marry
Nigeria	prim and sec, TC, univ	North: save life of woman South: physical or mental health	government supports access for all ages	9-16[a]
Rwanda	prim and sec	save life of woman	—	21
Senegal	in progress	health risk	—	16
Seychelles	prim and sec	save life of woman, rape or incest, birth defects	—	—
Sierra Leone	prim and sec, TC	save life of woman	illegal under 18	15
Somalia	prim and sec, TC	health risk	—	18
South Africa	—	health risk, with authorization	—	21
Sudan	—	save life of woman	—	—
Swaziland	—	physical or mental health	permitted to unmarried adolescent	16
Tanzania	prim and sec, TC	save life of woman	married women	16
Togo	prim and sec	save life of woman or health risk	—	17
Uganda	sec and TC	physical or mental health	—	18
Zaire	prim and sec	prohibited	—	—
Zambia	sec and TC FLE in factories	medical and social grounds	spousal consent required	21
Zimbabwe	in progress	save life of woman, rape or incest, birth defects	—	18

— Information not available.
prim: primary schools
sec: secondary schools
TC: teachers training colleges
univ: universities

[a]Varies according to major administrative divisions, religious groups, or ethnic groups.

Sources: Bledsoe and Cohen (1993); United Nations (1989a), United Nations (1989b), United Nations (1990)

STRATEGIES FOR REDUCING ADOLESCENT FERTILITY

Each provider plays a key role in helping adolescent clients make the complex decisions about whether to be sexually active, how to protect themselves if they are sexually active, what to do if pregnancy or an STI occurs, and where to seek support to pursue an education while learning to care for a baby. Each provider and clinic should create a positive atmosphere that lets young clients know they are welcome and will be treated with respect. An adolescent's decisions, health, and future can be significantly influenced by effective client-provider interaction.

Nations that seek to reduce sexual activity and fertility among adolescents will find the task puzzling and challenging. It is difficult to find successful models from other nations or cultures that have mounted strategies to reduce the pregnancy and childbearing rates of very young women. Many Western nations, such as the United States, have achieved little success in changing the reproductive patterns of these adolescents. Moreover, having thousands of cultures within Africa makes it impossible to suggest general strategies for the entire continent. In many African nations, adolescent childbearing is desirable in the context of marriage but undesirable outside of marriage. However, a pregnancy that occurs during the mother's adolescence poses medical hazards, whether the woman is married or not. STIs threaten the fertility and health of the married as well as the single woman. These risks can be reduced to some extent simply by providing adequate family planning and medical services to young women to help them delay childbearing and to protect against STIs.

Success in reaching acceptable levels of adolescent pregnancy, childbearing, and STIs will most likely come when strategies are developed and implemented at local levels. In addressing these issues, the health care providers must try to deliver positive messages and involve adolescents' peers and traditional birth attendants. However, medical interventions alone cannot solve most public health problems. One useful guide to follow when considering potential strategies for intervention is to focus on three major influences on health: (1) the medical system; (2) the personal behaviors of the adolescents themselves;

and (3) the political, social, and economic community environment. Listed in Table 4:2 are several strategies that have been used to reduce adolescent fertility: providing medical services, encouraging personal behavior change, and creating a community environment that meets adolescents' needs.

Table 4:2 Strategies for reducing adolescent fertility

Medical Services	Personal Behavior	Community
• Provide a broad variety of contraceptive methods	• Educate adolescents about making a life plan—deciding when pregnancy would fit into their lives	• Educate youth about family planning—through schools, churches, community leaders, and media
• Accept adolescent clients	• Encourage both young men and women to say "no" to sexual relations	• Rally commitment among community leaders to provide services to adolescents
• Train medical staff how to serve adolescent clients	• Encourage men to use condoms	• Gain acceptance of the concept of confidentiality
• Remove barriers to providing contraceptives (see WHO guidelines)	• Instill a commitment to avoid pregnancy and HIV infection	• Acknowledge the sexuality of adolescents
• Dispense a 1-year supply of contraceptives to each client	• Expect men to accept the consequences of their actions with women	• Take constructive rather than punitive measures
• Honor the adolescent's desire for confidentiality	• Discourage older men from having intercourse with virgins in order to avoid infection	• Educate workers in drug dispensaries to maintain confidentiality and be sensitive to adolescents' needs
• Make clinic hours and locations convenient for adolescent clients	• Provide prostitutes and their clients condoms and education on how to use condoms	• Improve the education of women
• Increase staff sensitivity to the embarrassment and consequences that sexually active adolescents face	• (fill in)_____ _____ _____ _____	• Increase women's status in the society
• Include family planning discussions in all medical encounters		• Raise the legal age for marriage
• Acknowledge that many adolescents are sexually active and need protection from pregnancy and sexually transmitted infection		• (fill in) _____ _____ _____ _____
• (fill in) _____ _____ _____ _____		

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